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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,380	08/13/2001	Satyendra Yadav	42390P11648	1017

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER

BULLOCK JR, LEWIS ALEXANDER

ART UNIT	PAPER NUMBER
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2195

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/929,380

Applicant(s)

YADAV, SATYENDRA

Examiner

Lewis A. Bullock, Jr.

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-38 and 65-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-38 and 65-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. The indicated allowability of claims 32-38 and 65-71 are withdrawn in view of the newly discovered reference(s) to U.S. Patent 6,253,230. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 35 and 68 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The cited claims do not provide a tangible result that has real world value. The real world value of the invention is that any dispatcher that receives a packet that corresponds to the previously received broadcast lock stored in the table, redirects the packet to the dispatcher that issued the lock (hence dependent claims 36 and 69). These claims or some form of equivalent are required in order to have the tangible result of the redirecting. Just the act of broadcasting a message to various entities has no real world value because the operation in and of itself serves no purpose / practical application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 32-38 and 65-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over COULAND (U.S. Patent 6,253,230).

As to claim 32, COULAND teaches a method comprising: receiving a packet (client request packet) at one dispatcher (forward engine) of a plurality of dispatchers (engines both forward and control) (col. 7, lines 13-43), the plurality of dispatchers coupled with a plurality of servers (server); searching a local dispatch table of the one dispatcher (look up table for connection) (col. 7, lines 13-43); transmitting the packet from the one dispatcher to a server of the plurality of servers if the local dispatch table identifies the server (via forwarding the client request over the existing switched connection straight to the server if there is an existing connection) (col. 7, lines 13-43); otherwise transmitting the packet from the one dispatcher (forward engine) to a locking dispatcher (control engine) of the plurality of dispatchers (col. 7, lines 13-43). See also, col. 7, lines 44-57; col. 8, lines 17-32; col. 8, lines 46-67; col. 11, lines 12-32; col. 11, lines 41-44; col. 11, line 62 – col. 12, line 5; col. 14, lines 1-40). However, COULAND does not explicitly mention that a client lock. As used in the claims the client lock indicates that a server has not been selected for the client request, such that communications that have the client lock are forwarded to the locking dispatcher for selection of the server. COULAND teaches that should the forwarding engine indicate that no connection for the client request exist, hence a nil value or error value, the request is relayed to the control engine for selection of the server. Therefore, by

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determining that there exist no table entry associated with this request by the forwarding engine and subsequently relaying the request to a locking dispatcher, e.g. the control engine that selects a server, COULAND obviously meets the limitation of transmitting a packet to a locking dispatcher if the dispatch table includes a client lock, i.e. an indication that there exist no connection for the client request such that request are sent to the control engine for selection. This is further supported in COULAND wherein the forwarding engine will continue forwarding packets to the cluster using the routed path (path to the control engine) until this request is satisfied (col. 11, lines 41-44). In addition, COULAND teaches the when there exist no connection in the table, the forwarding engine checks whether it can select the destination server locally or whether it must go to the control engine (col. 8, lines 45-67). This indication can also be considered as a client lock wherein it provides an indication that the request must go the control engine.

As to claim 35, COULAND teaches a method comprising: receiving a first packet (client request packet) at one dispatcher (forwarding engine) of a plurality of dispatchers (both forwarding engines and control engines), the first packet including a connection request from a client (client) (col. 7, lines 13-43); creating a client lock (indication of no connection / route path identification to the control engine) on packets received from the client (client request packets), the client lock indicating that packets received from the client are to be transmitted to the one dispatcher (control engine) until a server is selected for the client (col. 11, line 12 – col. 12, line 24; ; wherein the forwarding engine

will continue to forward packets to the cluster using the routed path until its request that the forwarding engine table is adjusted to the established channel for the client connection, e.g. synchronized with the control engine's table entry that established the connection); and broadcasting a dispatch table update from the one dispatcher to all other dispatchers of the plurality of dispatcher (via the forwarding engine is synchronized with various back-up forward engines /control engine in case the forwarding engine fails) (col. 14, lines 1-40). However, COULAND does not explicitly detail that the update message is an indication of the client lock. It would be obvious to one of ordinary skill in the art that since the goal of the fault-tolerance of the forwarding engine is to avoid a single point of failure by synchronizing the executing forwarding engines table entries and routing information with a back-up engines, that it would also contain the route path identification to the control engine that is used when packets are received that have no assigned server (see col. 13, line 48 – col. 14, line 18).

As to claim 33, COULAND teaches the steps of selecting a server from the plurality of servers; and transmitting the packet from the locking dispatcher to the selected server (col. 7, lines 21-47).

As to claim 34, COULAND teaches broadcasting a dispatch table update from the locking dispatcher (control engine) to all other dispatchers (forwarding engine and backup forward engines) of the plurality of dispatchers, the dispatch table update identifying the selected server (via control engine forwarding the selected server

switched address to the forward engine such that the forward engine will forward any subsequent packet to the server) (col. 7, lines 44-57; col. 8, lines 15-32). See also col. 11, line 12 – col. 12, line 24, wherein the forwarding engine will continue to forward packets to the cluster using the routed path until its request that the forwarding engine table is adjusted to the established channel for the client connection, e.g. synchronized with the control engine's table entry that established the connection. It would be obvious that since the forwarding engine contains a route path identifier to the control engine that this is the client lock.

As to claim 36, COULAND teaches receiving at least a second packet at another dispatcher (back-up forwarding engine) of the plurality of dispatchers; and transmitting the second packet from the another dispatcher to the one dispatcher (via the back-up forwarding engine having the same information as the primary forwarding engine before its failure such including the route to the control engine wherein the forwarding engine will continue forwarding packets to the cluster using the routed path until the request for a server selection is satisfied, therefore subsequent request are rerouted to the control engine until a server is selected based on the indication of the route) (col. 11, line 41 – col. 12, line 5; and col. 14, lines 1-40).

As to claim 37, COULAND teaches selecting a server from a plurality of servers coupled with the plurality of dispatchers (via the control engine selecting a server) (col. 7, lines 21-43); and transmitting the first packet and the second packet to the selected

server (via the initial client request was forwarded by the control engine and subsequent request are forward on the same connection) (col. 7, lines 44-57).

As to claim 38, COULAND teaches broadcasting another dispatch table update from the one dispatcher to the all other dispatchers, the another dispatch table update identifying the selected server (via control engine forwarding the selected server switched address to the forward engine such that the forward engine will forward any subsequent packet to the server) (col. 7, lines 44-57; col. 8, lines 15-32). See also col. 11, line 12 – col. 12, line 24, wherein the forwarding engine will continue to forward packets to the cluster using the routed path until its request that the forwarding engine table is adjusted to the established channel for the client connection, e.g. synchronized with the control engine's table entry that established the connection. It would be obvious that since the forwarding engine contains a route path identifier to the control engine that this is the client lock.

As to claims 65-71, reference is made to an article of manufacture that corresponds to the method of claims 32-38 and is therefore met by the rejection of claims 32-38 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571)

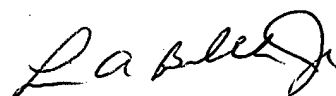
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272-3759. The examiner can normally be reached on Monday-Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

January 22, 2007



LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER